TEST SCENARIO DOCUMENT

Fake News Detection using Social Media Data

(TCS iON – Industry Project)

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1. Overview

This document defines the high-level test scenarios required to validate the Fake News Detection system. The scenarios describe what needs to be tested to ensure correct classification, proper handling of invalid inputs, confidence-based decision logic, and frontend-backend integration.

2. Application / Screen

Model Frontend – News Classification (Streamlit Web Interface)

3. Functional Requirements

- FR_01: Classify real news content
- FR_02: Classify fake or misleading news content
- FR_03: Handle insufficient or invalid input
- FR_04: Handle low-confidence predictions
- FR_05: Ensure frontend and backend integration

4. Test Scenarios

Test Scenario ID: TS_01

- Requirement ID: FR_01
- Application / Screen: Model Frontend – News Classification
- High-Level Test Condition: User provides valid real news text
- Expected Result: “Likely Real News” with confidence ≥ 0.90
- Priority: High

Test Scenario ID: TS_02

- Requirement ID: FR_02
- High-Level Test Condition: User provides fake or misleading news text
- Expected Result: “Likely Fake News” with confidence ≥ 0.90
- Priority: High

Test Scenario ID: TS_03

- Requirement ID: FR_03
- High-Level Test Condition: User enters text that does not meet validation rules
- Expected Result: Validation warning displayed and analysis blocked
- Priority: High

Test Scenario ID: TS_04

- Requirement ID: FR_04
- High-Level Test Condition: User provides ambiguous or neutral news content
- Expected Result: “Inconclusive” result due to low confidence
- Priority: Medium

Test Scenario ID: TS_05

- Requirement ID: FR_05
- High-Level Test Condition: Valid input processed end-to-end
- Expected Result: Prediction displayed successfully on UI
- Priority: Medium

5. Summary

These test scenarios cover all major functional aspects of the Fake News Detection system and ensure reliable behavior under normal, edge-case, and error conditions.